

CLAIM AMENDMENTS

Claim Amendment Summary

Claims pending

- Before this Amendment: Claims 1-53.
- After this Amendment: Claims 1-39 and 44-54

Canceled claims: 40-43

Amended claims: 1-23, 25, 29-39, and 44-53

New claims: 54

Claims:

1. (Currently Amended) A processor-readable medium comprising ~~processor-encoded with executable instructions that, when executed, direct a server computer to perform a method for updating client computer for performing software updates, the processor executable instructions comprising instructions for, the method comprising:~~

~~assigning, by the server computer, a level of service to each of a plurality of client computers users, by which the software updates will be performed;~~

~~scheduling, by the server computer, performance of the software updates to a particular client computer user from among the plurality of client computers~~

users according to the level of service assigned to ~~that the particular client computer user~~; and

initiating, by the server computer, performing execution of the software updates to the particular client computer, according to the schedule.

2. (Currently Amended) The processor-readable medium of claim 1, ~~wherein the method further comprises additionally comprising instructions for:~~

~~displaying a notification icon to a user; and~~

configuring by the server computer, a postponement the notification icon that, when displayed by the particular client computer and selected by a user, causes the execution of to allow the user to postpone the software updates to be postponed within a grace period, wherein the grace period is followed by an enforcement period within which selection of the notification-postponement icon is prohibited so that execution of does not allow the user to postpone the software updates may not be further postponed.

3. (Currently Amended) The processor-readable medium of claim 2, wherein assigning the level of service comprises ~~instructions for:~~

~~establishing the grace period and the enforcement period; and~~

~~wherein by shortening the grace period a higher level of service results due to more rapid application of the software updates.~~

4. (Currently Amended) The processor-readable medium of claim 1, wherein the method further comprises ~~additionally comprising instructions for:~~
~~displaying a notification icon to a user; and~~
~~configuring, by the server computer, an execution~~ the notification icon
~~that, when displayed by the particular client computer and selected by a user,~~
~~causes the execution of the software updates to be initiated immediately to allow~~
~~the user to initiate performance of the software updates.~~

5. (Currently Amended) The processor-readable medium of claim 4, wherein configuring the ~~notification~~ execution icon comprises ~~instructions for:~~
~~enabling providing the client computer~~ user with a first choice to display a
reminder about installing the software updates; and
~~enabling providing the client computer~~ user with a second choice to display
the execution icon ~~install the software updates.~~

6. (Currently Amended) The processor-readable medium of claim 5, wherein the ~~first choice of displaying the reminder~~ comprises ~~instructions for:~~
~~displaying information on grace and enforcement periods associated with~~
the software updates;

wherein the grace period is a period during which the ~~user~~execution of the software updates is allowed to ~~be postponed~~postpone performance of software updates;

wherein the grace period is configurable by an ~~a~~server administrator; and

wherein the enforcement period is a period, configured by the server administrator to follow the grace period, during which execution of the software updates the ~~user~~ is not allowed to ~~be postponed~~postpone performance of software updates.

7. (Currently Amended) The processor-readable medium of claim 5, wherein enabling the client computer to display the execution icon ~~the second choice of installing the software updates~~ comprises instructions for:

enabling an allowing the update start time to be modified by a user of the client computer; and ~~user to schedule an update start time~~; and

enabling a allowing the client computer reboot time to be modified by a user of the client computer ~~user to schedule a reboot time~~.

8. (Currently Amended) The processor-readable medium of claim 1, wherein the method further performing the software update comprises additional instructions for deploying annoyance reminders to the client computer urging a user of the client computer ~~user~~ to reboot.

9. (Currently Amended) The processor-readable medium of claim 1, wherein ~~the method further performing the software update comprises~~ causing additional instructions for the client-computer to automatically perform performing the software updates following a grace period.

10. (Currently Amended) The processor-readable medium of claim 1, wherein ~~the method further performing the software update comprises~~ enabling additional instructions for the client computer to delay ~~delaying the performance until after conclusion of a user-initiated postponement within a grace period.~~

11. (Currently Amended) The processor-readable medium of claim 1, wherein ~~the scheduling performance of the software updates comprises additional instructions for configuring a change~~ time-window, wherein the change time-window defines a period of time within which client computers will not be restricted from performing the updates will be performed.

12. (Currently Amended) The processor-readable medium of claim 11, wherein assigning the level of service comprises ~~additional instructions for configuring~~ a duration of the change time-window, wherein a longer duration

implies a higher level of service and a shorter duration implies a lower level of service.

13. (Currently Amended) The processor-readable medium of claim 11, wherein the scheduling further comprises~~performance of the software updates comprises additional instructions for:~~

defining failsafe timeout periods for each of the software updates; and

adjusting the failsafe timeout periods according to individual client computer ~~computer~~ performance, wherein longer failsafe timeout periods are assigned where the individual client computer ~~computer~~ performance is slower.

14. (Currently Amended) The processor-readable medium of claim 11, wherein the method further comprises~~comprising additional instructions for:~~

applying updates during the change time-window; and

monitoring a failsafe timeout for each update applied.

15. (Currently Amended) The processor-readable medium of claim 11, wherein the method further comprises ~~comprising additional instructions for~~ identifying updates for which there was insufficient time within the change time-window for installation within a second change time-window.

16. (Currently Amended) The processor-readable medium of claim 11, wherein the method further comprises, ~~comprising additional instructions for,~~ when time remaining within the change time-window is less than a failsafe timeout for any remaining software updates, suspending application of the remaining software updates.

17. (Currently Amended) The processor-readable medium of claim 11, wherein the method further comprises ~~comprising additional instructions for~~ associating client computers ~~servers~~ into groups, wherein each group is assigned a change time-window, ~~and wherein the groups are sized to allow simultaneous updating of the client computers servers in each of the groups without disrupting work flow.~~

18. (Currently Amended) The processor-readable medium of claim 1, wherein the method further comprises ~~comprising additional instructions for:~~

grouping a plurality of the software updates into a package; and

configuring the package for differential enforcement whereby different client computers ~~computers~~ would receive different software updates from the package.

19. (Currently Amended) The processor-readable medium of claim 18, wherein the method further comprises ~~comprising additional instructions for programmatically obtaining the plurality of software updates from a trusted source of update content.~~

20. (Currently Amended) The processor-readable medium of claim 18, wherein the method further comprises ~~comprising additional instructions for configuring the package for SMS consumption.~~

21. (Currently Amended) The processor-readable medium of claim 18, wherein assigning the level of service comprises ~~additional instructions for~~ providing different rules of enforcement within the package to result in different application of software updates within the package to different client computers.

22. (Currently Amended) The processor-readable medium of claim 18, wherein assigning the level of service comprises ~~additional instructions for~~ partitioning the package of software updates to separate trusted updates from un-trusted updates.

23. (Currently Amended) The processor-readable medium of claim 22, wherein assigning the level of service further comprises ~~comprising additional~~

~~instructions for merging~~ the un-trusted software updates with the trusted software updates based on performance of the un-trusted updates in a test environment.

24. (Original) The processor-readable medium of claim 22, wherein the partitioning is expressed in XML configured to inform different clients of updates suitable for their consumption.

25. (Currently Amended) The processor-readable medium of claim 1, wherein assigning the level of service comprises: ~~additional instructions for~~
incorporating an authorization list of approved updates into a template based on a standard image.

26. (Original) The processor-readable medium of claim 25, wherein the template is written into an XML document.

27. (Original) The processor-readable medium of claim 26, wherein the XML document is consumed and deployed as a mirror of a desired state for software updates.

28. (Original) The processor-readable medium of claim 27, wherein the XML document is consumed and deployed by SMS.

29. (Currently Amended) A method for performing software updates on a client computer, the method comprising:

receiving, from a server computer, a software update to be executed on the client computer;

~~assigning a service level to each user by which software updates will be performed;~~

displaying an icon configured to allow a client computer user ~~user~~ a choice between displaying software update reminders and immediate initiation of installation of the software ~~updates~~update by the client computer;

wherein the software reminders include information on grace periods within which installation of the software update may be postponed and information on the onset of enforcement periods after which installation of the software update may not be postponed; and

providing a user interface to allow selection of a time for the client computer to perform the installation of the software update and to allow selection of a time for the client computer to initiate a to-reboot, wherein the time selected is based in part on the a level of service ~~assigned-level-of-service to the client computer by the server computer.~~

30. (Currently Amended) A processor-readable medium comprising processor-executable instructions that, when executed, direct a client computer to execute a method for ~~for assisting a user to update~~ updating software on the client computer, the ~~processor-executable instructions~~ method comprising ~~instructions for:~~

displaying an icon that represents ~~configured to allow a user~~ a choice between displaying software update reminders and initiating immediate initiation of installation of the software updates;

wherein the software update reminders include information on grace periods within which installation of the software updates by the client computer may be postponed and information on the onset of enforcement periods after which installation of the software updates by the client computer may not be postponed; and

providing a user interface to allow selection of a time for the client computer to perform the installation of the software updates and to allow selection of a time for the client computer to initiate a ~~to~~ reboot.

31. (Currently Amended) The processor-readable medium of claim 30, wherein the method further comprises; ~~additionally comprising:~~ instructions for

providing a client computer user ~~user~~-interface at repeated intervals to persuade a ~~client computer user~~ ~~user~~ to facilitate the reboot of the client computer, where the software updates have been installed and no reboot has been performed.

32. (Currently Amended) The processor-readable medium of claim 30, wherein the method further comprises; ~~—additionally comprising instructions for~~

setting the grace periods and the enforcement periods to control a level of service provided to the client computer. ~~by the system.~~

33. (Currently Amended) The processor-readable medium of claim 30, wherein the method further comprises; ~~—additionally comprising instructions for~~

periodically displaying ~~showing~~ the user information about software updates that have not yet been performed.

34. (Currently Amended) A method executed by a server computer for performing software updates on client computers, the method comprising:
associating client computers ~~servers~~ into groups; ~~groups sized to allow simultaneous updating of servers in each group without disrupting work flow;~~

establishing a change time-window for each of the groups; and
initiating, by the server computer, software updates~~applying updates to~~
the client computers within the change time-window established for each group
of client computers;~~while~~
monitoring by the server computer a failsafe timeout for each update.

35. (Currently Amended) A processor-readable medium comprising
~~processor-encoded with executable instructions that, when executed, direct a~~
server computer to perform a method for updating client computer for
~~performing software updates, the processor-executable instructions comprising~~
instructions for, the method comprising:

~~associating client computers servers into groups sized to allow~~
~~simultaneous updating of servers in each group without disrupting work flow;~~
establishing a change time-window for each of the groups; and
initiating, by the server computer, software updates~~applying updates to~~
the client computers within the change time-window established for each group
of client computers;~~while~~
monitoring by the server computer a failsafe timeout for each update.

36. (Currently Amended) The processor-readable medium of claim
35, the method further comprising: ~~additionally comprising instructions for~~

~~installing application of each software update; and for~~
setting the failsafe timeout with reference to the anticipated duration of
~~times for installation application.~~

37. (Currently Amended) The processor-readable medium of claim
35, the method further comprising: ~~additionally comprising instructions for~~
determining ,by the server computer, if the failsafe timeout for each
software update is greater than time remaining within the change time-window,
and if so, ~~for~~ suspending installation of the software update.

38. (Currently Amended) The processor-readable medium of claim
35, the method further comprising: ~~additionally comprising instructions for~~
identifying, by the server computer, software updates for potential
installation in a second change time-window, ~~software updates~~ which were not
installed in the change time-window.

39. (Currently Amended) A method executed by a server computer
for performing software updates, the method comprising:
grouping a plurality ~~large number~~ of software updates into a package;

configuring the package for differential enforcement, wherein different client computers are assigned by the server given different periods of time within which to perform a software update will be initiated; and

configuring the package for SMS consumption.

40. (Canceled) ~~A processor-readable medium comprising processor-executable instructions for performing software updates, the processor-executable instructions comprising instructions for:~~

~~grouping a large number of software updates into a package;~~

~~configuring the package for differential enforcement, wherein different client computers are given different periods of time within which to perform a software update; and~~

~~configuring the package for SMS consumption.~~

41. (Canceled) ~~The processor-readable medium of claim 40, additionally comprising instructions for configuring the package with content from a trusted website.~~

42. (Canceled) ~~The processor-readable medium of claim 40, additionally comprising instructions for distributing the package by utilizing SMS to a plurality of client computers.~~

43. (Canceled)

~~The processor-readable medium of claim 40, additionally comprising instructions for performing software updates differentially on a plurality of computers using the package.~~

44. (Currently Amended) A method executed by a server system for performing client computer software updates, the method comprising:

forming a package with a plurality of software updates;

partitioning the package to divide trusted updates from un-trusted updates;

distributing the package to a plurality of client computers, such that clients; and

installing appropriate software updates are installed on each of the plurality of clients, wherein the un-trusted software updates are installed only on client computers clients configured by the server to install un-trusted software updates within a test environment.

45. (Currently Amended) A processor-readable medium comprising processor-encoded with executable instructions that, when executed, direct a server computer to perform a method for updating client computer for

~~performing software updates, the processor executable instructions comprising instructions for, the method comprising:~~

forming a package with a plurality of software updates;
partitioning the package to divide trusted updates from un-trusted updates;
distributing the package to a plurality of client computers such that clients;
and
installing appropriate software updates are installed on each of the plurality of client computers clients, wherein the un-trusted software updates are installed only on clients configured to install un-trusted software updates within ~~within a test environment.~~

46. (Currently Amended) The processor-readable medium of claim 45, the method further comprising: additionally comprising instructions for
merging un-trusted software updates together with the trusted software updates in response to performance of the un-trusted software updates on clients having un-trusted software updates installed.~~in the test environment.~~

47. (Currently Amended) The processor-readable medium of claim 45, the method further comprising: additionally comprising instructions for
expressing the partitioning of the package partition with XML.

48. (Currently Amended) The processor-readable medium of claim 45, the method further comprising: additionally comprising instructions, embedding within the package, instructions that when executed by the client computer, facilitate the for expressing to client computers clients which software updates are suitable for their consumption.

49. (Currently Amended) A method implemented by a server computer for performing software updates, the method comprising:

using a reference client computer to generate a template ~~having an authorization list of approved updates;~~

deploying the template to a plurality of client computers ~~client computers;~~
and

initiating performing software updates on to the plurality of client computers according to the template.

50. (Currently Amended) A processor-readable medium comprising ~~processor-encoded with executable instructions that, when executed, direct a server computer to perform a method for updating client computer for performing software updates, the processor-executable instructions comprising instructions for, the method comprising:~~

using a reference client computer to generate a template ~~having an~~
authorization list of approved updates;

deploying the template to a plurality of client computers ~~client computers~~;
and

~~initiating~~ performing software updates ~~on to~~ the plurality of client
computers according to the template.

51. (Currently Amended) The processor-readable medium of claim
50, the method further comprising: ~~additionally comprising instructions for~~
incorporating the template into an XML file.

52. (Currently Amended) The processor-readable medium of claim
50, the method further comprising: ~~wherein~~
deploying the template ~~comprises~~ with instructions for configuring the
template for SMS consumption and deployment.

53. (Currently Amended) The processor-readable medium of claim
50, the method further comprising: ~~additionally comprising instructions for~~
using the template to identify a subset of software update files from a
~~large file including a plurality of software update files.~~

54. (New) A processor-readable medium comprising processor-executable instructions for performing software updates, the processor-executable instructions comprising instructions for:

- configuring the package with content from a trusted website;
- grouping a plurality of software updates into a package;
- configuring the package for SMS consumption;
- partitioning the package to divide trusted updates from un-trusted updates;
- distributing the package by utilizing SMS to a plurality of client-computers;
- associating client-computers into groups;
- establishing a change time-window for each of the groups;
- expressing to client-computers which software updates are suitable for consumption;
- installing updates on each of the plurality of clients within the change time-window established for the group the client is a member of;
- installing the un-trusted software updates are installed only on client-computers configured to install un-trusted software updates;
- setting a failsafe timeout with reference to the anticipated duration of installation;
- monitoring a failsafe timeout for each update;

determining if the failsafe timeout for each software update is greater than time remaining within the change time-window, and if so, for suspending installation of the software update.